

What is claimed is:

1. A method for fabricating an integrated multipane window sash comprising:

providing a sash frame having a glazing pane installation opening accessible from a first side thereof and a glazing pane support surface on a second side thereof;

inserting a first glazing pane into said opening and placing an outside surface perimeter of said pane adjacent to said support surface;

inserting a second glazing pane into said opening and mounting an inside surface perimeter of said second pane adjacent to an inside surface perimeter of said first glazing pane; and

installing at least one glazing bead along at least a portion of the glazing pane installation opening after the glazing panes have been inserted.

2. A method in accordance with claim 1 wherein at least one additional glazing pane is inserted into said opening and mounted adjacent to a previous glazing pane prior to said glazing bead installing step.

3. A method in accordance with claim 1 wherein said second pane is mounted to said first pane via an adhesive.

4. A method in accordance with claim 3 wherein said adhesive is applied to at least a portion of the inside surface perimeter of said first glazing pane.

5. A method in accordance with claim 3 wherein said adhesive is applied to at least a portion of the inside surface perimeter of said second glazing pane.

6. A method in accordance with claim 3 wherein said adhesive is applied to at least a portion of said sash frame.

7. A method in accordance with claim 3 wherein said adhesive comprises at least one of:

- (i) a bead of adhesive,
- (ii) a preformed adhesive foam,
- (iii) an expanding adhesive foam,
- (iv) a preformed adhesive tape,
- (v) a desiccated adhesive,
- (vi) a chemical sealant.

8. A method in accordance with claim 1 wherein at least a portion of the outside surface perimeter of said first glazing pane is adhesively mounted to said support surface.

9. A method in accordance with claim 1 wherein at least a portion of the outside surface perimeter of said first glazing pane is adhesively mounted to said support surface via at least one of:

- (i) a bead of adhesive,
- (ii) a preformed adhesive foam,
- (iii) an expanding adhesive foam,
- (iv) a preformed adhesive tape,
- (v) a desiccated adhesive,
- (vi) a chemical sealant.

10. A method in accordance with claim 1 wherein said support surface comprises a lip extending around the second side of said sash frame.

11. A method in accordance with claim 1 comprising the further step of providing a desiccant between said first and second glazing panes.

12. A method in accordance with claim 1 wherein said glazing bead exerts pressure on the outside surface perimeter of the last glazing pane inserted into said glazing pane installation opening, thereby biasing the glazing panes toward said support surface.

13. A method in accordance with claim 1, comprising the further step of providing setting blocks on said sash frame to facilitate positioning of at least one of said glazing panes.

14. A method in accordance with claim 1, wherein the first glazing pane is mounted to float on the support surface and the second glazing pane is mounted to float on said first glazing pane, such that the

glazing panes function independently with respect to stresses.

15. A method in accordance with claim 1, wherein:

the outside surface perimeter of said first glazing pane is adhesively mounted to said support surface via an adhesive that is applied to at least a portion of the support surface by co-extrusion with a sash profile used to fabricate said sash frame.

16. A method in accordance with claim 1, wherein:

the outside surface perimeter of said first glazing pane is adhesively mounted to said support surface via an adhesive that is applied to at least a portion of the support surface by extrusion after fabrication of said sash frame.

17. A method in accordance with claim 1, comprising:

applying an adhesive to at least a portion of the outside surface perimeter of said first glazing pane to adhesively mount said first glazing pane to said support surface.

18. A method in accordance with claim 1 wherein:

at least one of said glazing panes is mounted within said sash frame using an adhesive; and

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edges of said at least one glazing pane are at least partially embedded into the adhesive.

19. A method in accordance with claim 1, wherein the second pane is mounted to said first pane with a space therebetween.

20. A method in accordance with claim 19 comprising the further steps of:

filling said space with an inert gas; and

sealing the space to prevent leakage of said gas therefrom.

21. A method in accordance with claim 1, further comprising installing at least one spacing clip between said first and second glazing panes.

22. A method in accordance with claim 21, wherein said spacing clip is adapted to secure at least one muntin bar within a space defined by the spacing clip between said first and second glazing panes.

23. A method in accordance with claim 1, further comprising applying an adhesive between said glazing bead and an adjacent glazing pane.

24. A method in accordance with claim 1, further comprising installing a gasket between said glazing bead and an adjacent glazing pane.

25. A method in accordance with claim 1, wherein edges of said glazing panes are substantially completely embedded in adhesive.

26. A method in accordance with claim 1 wherein said second pane is mounted to said first pane via a spacer.

27. A method in accordance with claim 1 further comprising filling a cavity between said spacer and an inside perimeter of said sash frame with an adhesive.

28. A method in accordance with claim 27 wherein said cavity is partially filled from the spacer toward the sash frame, without the adhesive contacting the inside perimeter.

29. A method in accordance with claim 27 wherein said cavity is substantially completely filled from the spacer to said inside perimeter, with the adhesive contacting the inside perimeter.

30. A method in accordance with claim 27, wherein edges of said glazing panes are at least partially embedded in said adhesive.

31. A method in accordance with claim 26 comprising using a portion of said spacer as a setting block for at least one glazing pane.

32. A method in accordance with claim 26 wherein at least a portion of said spacer is T-shaped.

33. A method in accordance with claim 32 wherein said spacer includes a setting block portion.

34. A method in accordance with claim 26 further comprising providing at least one simulated muntin bar integral with said spacer.

35. A method in accordance with claim 26 further comprising providing said spacer with a mounting element for at least one simulated muntin bar.

36. A method in accordance with claim 35 wherein said mounting element comprises a groove associated with said spacer.

37. A method in accordance with claim 26 wherein said spacer comprises at least one of:

- (i) a bead of adhesive,
- (ii) a bead of desiccant,
- (iii) a preformed rigid material,
- (iv) a preformed or expanding foam,
- (v) a preformed adhesive
- (vi) a preformed desiccant material.

38. A method in accordance with claim 26 wherein the glazing panes are of unequal size.

39. A method in accordance with claim 1 wherein said glazing bead comprises a rigid strip that is attached to said sash frame.

40. A method in accordance with claim 1 wherein said glazing bead comprises a flexible adhesive material.

41. A method in accordance with claim 1, comprising:

applying an adhesive between at least a portion of the outside surface perimeter of said first glazing pane and said support surface, and

providing a first dam leg between said support surface and an inside perimeter of said sash frame to isolate the adhesive from a space between said first and second glazing panes.

42. A method in accordance with claim 41, comprising:

providing a second dam leg in parallel with said first dam leg such that said adhesive is constrained between the dam legs.

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